What is claimed is:

1. (original) A composition comprising 2:1 R-(-)-modafinil:S-(+)-modafinil.

2. (original) The composition of claim 1, wherein:

(a) the composition is characterized by a powder X-ray diffraction pattern comprising peaks expressed in terms of 2-theta angles, wherein:

(i) said composition is 2:1 R-(-)-modafinil:S-(+)-modafinil and said X-ray diffraction pattern comprises peaks at 8.97, 10.15, and 20.39 degrees;

(ii) said composition is 2:1 R-(-)-modafinil:S-(+)-modafinil and said X-ray diffraction pattern comprises peaks at 8.97 and 18.19 degrees;

(iii) said composition is 2:1 R-(-)-modafinil:S-(+)-modafinil and said X-ray diffraction pattern comprises peaks at 10.15 and 20.39 degrees;

(iv) said composition is 2:1 R-(-)-modafinil:S-(+)-modafinil and said X-ray diffraction pattern comprises peaks at 15.77 and 19.25 degrees; or

(v) said composition is 2:1 R-(-)-modafinil:S-(+)-modafinil and said X-ray diffraction pattern comprises a peak at 8.97 degrees; or

(b) the composition is characterized by a DSC thermogram, wherein said composition is 2:1 R-(-)-modafinil:S-(+)-modafinil and said DSC thermogram comprises an endothermic transition at about 167 degrees C.

3. (original) The composition of claim 1, wherein the composition is a pharmaceutical composition.

4. (original) A composition comprising R-(-)-modafinil Form III.

5. (original) The composition of claim 4, wherein:

(a) the composition is a polymorph and is characterized by a powder X-ray diffraction pattern comprising peaks expressed in terms of 2-theta angles, wherein:

(i) said composition is a modafinil polymorph and said X-ray diffraction pattern comprises peaks at 7.21, 10.37, and 17.73 degrees;

(ii) said composition is a modafinil polymorph and said X-ray diffraction pattern comprises peaks at 7.21 and 10.37 degrees;

(iii) said composition is a modafinil polymorph and said X-ray diffraction pattern comprises peaks at 17.73 and 19.23 degrees;

(iv) said composition is a modafinil polymorph and said X-ray diffraction pattern comprises peaks at 10.37 and 21.77 degrees; or

(v) said composition is a modafinil polymorph and said X-ray diffraction pattern comprises a peak at 7.21 degrees; or

(b) the composition is characterized by a DSC thermogram, wherein said composition is a modafinil polymorph and said DSC thermogram comprises an endothermic transition at about 161 degrees C.

6. (original) The composition of claim 4, wherein the composition is a pharmaceutical composition.

7. (original) A composition comprising R-(-)-modafinil Form V.

8. (original) The composition of claim 7, wherein the composition is a polymorph and is characterized by a powder X-ray diffraction pattern comprising peaks expressed in terms of 2-theta angles, wherein:

(a) said composition is a modafinil polymorph and said X-ray diffraction pattern comprises peaks at 6.61, 10.39, and 16.49 degrees;

(b) said composition is a modafinil polymorph and said X-ray diffraction pattern comprises peaks at 6.61 and 10.39 degrees;

(c) said composition is a modafinil polymorph and said X-ray diffraction pattern comprises peaks at 13.99 and 17.73 degrees; or

(d) said composition is a modafinil polymorph and said X-ray diffraction pattern comprises peaks at 20.87 and 22.31 degrees; or

(e) said composition is a modafinil polymorph and said X-ray diffraction pattern comprises a peak at 6.61 degrees.

9. (original) The composition of claim 7, wherein the composition is a pharmaceutical composition.

10. (original) A composition comprising R-(-)-modafinil Form IV.

11. (original) The composition of claim 10, wherein:

(a) the composition is a polymorph and is characterized by a powder X-ray diffraction pattern comprising peaks expressed in terms of 2-theta angles, wherein:

(i) said composition is a modafinil polymorph and said X-ray diffraction pattern comprises peaks at 7.79, 10.31, and 11.77 degrees;

(ii) said composition is a modafinil polymorph and said X-ray diffraction pattern comprises peaks at 7.79 and 10.31 degrees;

(iii) said composition is a modafinil polymorph and said X-ray diffraction pattern comprises peaks at 16.49 and 17.33 degrees;

(iv) said composition is a modafinil polymorph and said X-ray diffraction pattern comprises peaks at 19.47 and 23.51 degrees; or

(v) said composition is a modafinil polymorph and said X-ray diffraction pattern comprises a peak at 7.79 degrees; or

(b) the composition is characterized by a DSC thermogram, wherein said composition is a modafinil polymorph and said DSC thermogram comprises an endothermic transition at about 147 degrees C.

12. (original) The composition of claim 10, wherein the composition is a pharmaceutical composition.

13. (original) A method of making a polymorph of R-(-)-modafinil, comprising:
(a) providing R-(-)-modafinil; and
(b) crystallizing the polymorph of R-(-)-modafinil from an appropriate solvent.

14. (original) A method of making 2:1 R-(-)-modafinil:S-(+)-modafinil, comprising:
(a) providing R-(-)-modafinil and a form of the S-isomer of modafinil; and
(b) crystallizing the 2:1 R-(-)-modafinil:S-(+)-modafinil from a solvent or a mixture of solvents.

15. (original) A method of making R-(-)-modafinil form III, comprising:
(a) providing R-(-)-modafinil; and
(b) crystallizing the R-(-)-modafinil form III from a solvent or a mixture of solvents.

16. (original) A method of making R-(-)-modafinil form IV, comprising:
(a) providing R-(-)-modafinil; and
(b) crystallizing the R-(-)-modafinil form IV from a solvent or a mixture of solvents.

17. (original) A method of making R-(-)-modafinil form V, comprising:
(a) providing R-(-)-modafinil; and
(b) crystallizing the R-(-)-modafinil form V from a solvent or a mixture of solvents.

18. (original) The composition of claim 2, wherein said composition further comprises a diluent, excipient, or carrier.

19. (original) The composition of claim 18, wherein said composition is a pharmaceutical composition.

20. (original) A method for treating a subject suffering from excessive daytime sleepiness associated with narcolepsy, narcolepsy, multiple sclerosis related fatigue, infertility, eating disorders, attention deficit hyperactivity disorder (ADHD), Parkinson's disease, incontinence, sleep apnea, or myopathies, which comprises administering to a subject a therapeutically effective amount of Form III, Form IV, or Form V of R-(-)-modafinil.

21. (original) The method according to claim 20, wherein the subject is a human subject.

22. (original) The method according to claim 20, wherein R-(-)-modafinil Form III is administered.

23. (original) A solvate of R-(-)-modafinil, wherein the solvent molecule is selected from the group consisting of: chloroform, chlorobenzene, and acetic acid.

24. (original) The solvate of claim 23, wherein the solvate is characterized by a powder X-ray diffraction pattern comprising peaks expressed in terms of 2-theta angles, wherein:

(a) said solvate is a chloroform solvate and said X-ray diffraction pattern comprises peaks at 8.97, 12.07, and 14.20 degrees;

(b) said solvate is a chloroform solvate and said X-ray diffraction pattern comprises peaks at 17.49, 18.56, and 20.87 degrees;

(c) said solvate is a chloroform solvate and said X-ray diffraction pattern comprises peaks at 8.97 and 12.07 degrees; or

(d) said solvate is a chloroform solvate and said X-ray diffraction pattern comprises peaks at 20.87 and 23.11 degrees; or

(c) said solvate is a chloroform solvate and said X-ray diffraction pattern comprises a peak at 8.97 degrees.

25. (original) The solvate of claim 23, wherein the solvate is characterized by a powder X-ray diffraction pattern comprising peaks expressed in terms of 2-theta angles, wherein:

(a) said solvate is a chlorobenzene solvate and said X-ray diffraction pattern comprises peaks at 4.51, 6.25, and 7.77 degrees;

(b) said solvate is a chlorobenzene solvate and said X-ray diffraction pattern comprises peaks at 10.37, 16.61, and 17.95 degrees;

(c) said solvate is a chlorobenzene solvate and said X-ray diffraction pattern comprises peaks at 4.51 and 7.77 degrees; or

(d) said solvate is a chlorobenzene solvate and said X-ray diffraction pattern comprises peaks at 10.37 and 17.95 degrees; or

(e) said solvate is a chlorobenzene solvate and said X-ray diffraction pattern comprises a peak at 4.51 degrees.

26. (original) The solvate of claim 23, wherein the solvate is characterized by a powder X-ray diffraction pattern comprising peaks expressed in terms of 2-theta angles, wherein:

(a) said solvate is an acetic acid solvate and said X-ray diffraction pattern comprises peaks at 9.17, 10.20, and 16.61 degrees;

(b) said solvate is an acetic acid solvate and said X-ray diffraction pattern comprises peaks at 6.53, 6.94, and 17.59 degrees;

(c) said solvate is an acetic acid solvate and said X-ray diffraction pattern comprises peaks at 9.17 and 10.20 degrees; or

(d) said solvate is an acetic acid solvate and said X-ray diffraction pattern comprises peaks at 16.61 and 17.59 degrees; or

(e) said solvate is an acetic acid solvate and said X-ray diffraction pattern comprises a peak at 9.17 degrees.

27. (new) The method according to claim 20, wherein R-(-)-modafinil Form IV is administered.

28. (new) The method according to claim 20, wherein R-(-)-modafinil Form V is administered.

29. (new) A method for treating a subject suffering from excessive daytime sleepiness associated with narcolepsy, narcolepsy, or sleep apnea, which comprises administering to a subject a therapeutically effective amount of Form V of R-(-)-modafinil.

30. (new) A method for treating a subject suffering from attention deficit hyperactivity disorder (ADHD), which comprises administering to a subject a therapeutically effective amount of Form V of R-(-)-modafinil.